### **Program Strategies**

- Provide educators with NASA contentbased science, technology, engineering, and mathematics (STEM) resources and programs via professional development opportunities.
- Familiarize preservice educators with NASA resources, research opportunities, and educational strategies via professional development.
- Provide multi-day customized in-school programs for school districts.
- Establish inquiry-based hands-on student programs.
- Provide an interactive student assembly addressing NASA research initiatives from the past, present, and future.
- Provide a two-week professional development workshop for educators.
- Provide outreach programs for informal educational institutions.

To inspire the next generation of explorers . . .

as only NASA can.

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### **Education Focus**

"Our renewed focus on education means not only inspiring our youth but also providing educators with the tools they need to teach math and science and to improve the country's scientific literacy—and we have these tools available today." -NASA Administrator Sean O'Keefe



Interested school systems may obtain additional information by writing to the address below or by visiting the NASA **URCEP** Web site at http://education.nasa.gov/urcep

NASA Headquarters **Education Division** Attn: URCEP Program Manager Code N Washington, DC 20546



**Educational Program** 

**Educators** Grades 5-8

EP-2004-01-339-HQ

National Aeronautics and Space Administration

### **Urban and Rural Community Enrichment Program**



http://www.nasa.gov/education/urcep

- To inspire and motivate students to pursue careers in science, technology, engineering, and mathematics.
- To facilitate a greater awareness and utilization of NASA resources by educators through a series of inquiry-based hands-on professional development workshops.
- To familiarize preservice educators attending Historically Black
  Colleges and Universities (HBCUs),
  Hispanic-Serving Institutions
  (HSIs), Tribal Colleges and
  Universities (TCUs), and other major institutions with NASA resources and programs.
- To facilitate a greater awareness of NASA resources and programs to targeted populations such as community-based organizations and other public forums.
- To increase communication and awareness of new NASA resources through follow-up visits to school districts.



## Urban and Rural Community Enrichment Program

### **Established in 1981**

The NASA Urban and Rural Community Enrichment Program (URCEP) is a NASA Aerospace Education Services Program designed specifically to serve grades 5–8 in the education community of underrepresented and underserved populations in urban and rural sites.

This customized program is planned, coordinated, and implemented in participating schools by the URCEP team, along with school representatives. Using motivating demonstrations and scale models of aeronautical and space hardware, the URCEP specialists explain how basic scientific principles are applied in the exploration of aeronautics and space. Major activities for students include lectures, demonstrations, and hands-on classroom activities that supplement the current curriculum. Professional development workshops and other activities are offered for educators.

URCEP delivers unique and interesting activities for educators and middle school students from urban and rural communities. These activities provide opportunities to explore NASA's seven Enterprises—Education, Aeronautics, Biological and Physical Research, Earth Science, Exploration Systems, Space Flight, and Space Science—through real-life application of hands-on and minds-on experiences. Special emphasis is placed on communications, logic, and reasoning skills, and on increasing awareness of careers in science, technology, engineering, and mathematics (STEM).

School administrators and/or district coordinators are asked to select lead teachers from schools in their districts. In preparation for the customized program, NASA URCEP specialists train lead educators as a team to conduct interdisciplinary aerospace activities in school districts. The lead educators devote several weeks to working with the aerospace program in their schools where they facilitate interdisciplinary teams of teachers in interactions with the principal, faculty, and students. Lead educators also ensure that all preparations are made for implementing the aerospace programs. The NASA URCEP coordinator provides technical and logistical assistance.